DOCUMENT RESUME

ED 365 106 FL 021 625

AUTHOR Duran, Richard P.; Szymanski, Margaret H.
TITLE Construction of Learning and Interaction of Language Minority Children in Cooperative Learning. Report No. 45.
INSTITUTION Center for Research on Effective Schooling for Disadvantaged Students, Baltimore, MD.
SPONS AGENCY Office of Educational Research and Improvement (ED), Washington, DC.
PUB DATE Oct 93
CONTRACT R117R90002
NOTE 21p.
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Bilingual Education; Classroom Environment; Classroom Techniques; *Cooperative Learning; Elementary School Students; *English (Second Language); Grade 3; *Interaction; Literacy; Primary Education; Skill Development; Spanish Speaking; Writing Instruction
IDENTIFIERS *Language Minorities

ABSTRACT

This report analyzes the moment-by-moment construction of interaction by language minority children in a cooperative learning activity. The interaction occurred among students in a Spanish-English bilingual 3rd grade classroom as part of a cooperative learning curriculum known as Cooperative Integrated Reading and Composition (CIRC), which was especially adapted for use in bilingual classrooms by language minority students. The analysis of interaction reveals that under supportive social circumstances, children are very active in probing and questioning their own knowledge and they rely on their shared expertise to attain instructional goals and supplemental goals that are related to their own expertise and concerns. The report supports the importance of promoting learning as a constructive process wherein students actively develop new knowledge through manipulation and questioning of their existing knowledge. (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

SCOPE OF INTEREST NOTICE

The ERIC Facility has assigned this document for processing to: FL

In our judgment, this document is also of interest to the Clearinghouses noted to the right. Indexing should reflect their special points of view. UD

ED 365 106

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

CDS

THE JOHNS HOPKINS UNIVERSITY

Construction of Learning And Interaction of Language Minority Children In Cooperative Learning

Richard P. Durán
Margaret H. Szymanski

University of California
Santa Barbara

Report No. 45

October 1993

CENTER FOR RESEARCH ON EFFECTIVE SCHOOLING FOR DISADVANTAGED STUDENTS

FL021625

BEST COPY AVAILABLE

National Advisory Panel

Beatriz Arias, College of Education, Arizona State University

Mary Frances Berry, Department of History, University of Pennsylvania

Anthony S. Bryk, Department of Education, University of Chicago

Michael Charleston, Department of Education,
University of Colorado at Denver

Constance E. Clayton, Superintendent, Philadelphia Public Schools

Edmund Gordon (Chair), Department of Psychology, Yale University

Ronald D. Henderson, National Education Association

Vinetta Jones, Executive Director, EQUITY 2000, College Board

Arturo Madrid, Director, Tomas Rivera Center

Hernan LaFontaine, Administration and Supervision, Southern Connecticut
State University

William Julius Wilson, Department of Sociology, University of Chicago

Center Liaison

Harold Himmelfarb, Office of Educational Research and Improvement

BEST COPY AVAILABLE

Construction of Learning

And Interaction of Language Minority Children

In Cooperative Learning

Richard P. Durán
Margaret H. Szymanski

University of California
Santa Barbara

Report No. 45

October 1993

Published by the Center for Research on Effective Schooling for Disadvantaged Students, supported as a national research and development center by funds from the Office of Educational Research and Improvement (OERI), United States Department of Education (R117R90002). The opinions expressed in this publication do not reflect the position or policy of OERI, and no official endorsement should be inferred.

Center for Research on Effective Schooling for Disadvantaged Students
The Johns Hopkins University
3505 North Charles Street
Baltimore, Maryland 21218

The Center

The mission of the Center for Research on Effective Schooling for Disadvantaged Students (CDS) is to significantly improve the education of disadvantaged students at each level of schooling through new knowledge and practices produced by thorough scientific study and evaluation. The Center conducts its research in four program areas: The Early and Elementary Education Program, The Middle Grades and High Schools Program, the Language Minority Program, and the School, Family, and Community Connections Program.

The Early and Elementary Education Program

This program is working to develop, evaluate, and disseminate instructional programs capable of bringing disadvantaged students to high levels of achievement, particularly in the fundamental areas of reading, writing, and mathematics. The goal is to expand the range of effective alternatives which schools may use under Chapter 1 and other compensatory education funding and to study issues of direct relevance to federal, state, and local policy on education of disadvantaged students.

The Middle Grades and High Schools Program

This program is conducting research syntheses, survey analyses, and field studies in middle and high schools. The three types of projects move from basic research to useful practice. Syntheses compile and analyze existing knowledge about effective education of disadvantaged students. Survey analyses identify and describe current programs, practices, and trends in middle and high schools, and allow studies of their effects. Field studies are conducted in collaboration with school staffs to develop and evaluate effective programs and practices.

The Language Minority Program

This program represents a collaborative effort. The University of California at Santa Barbara and the University of Texas at El Paso are focusing on the education of Mexican-American students in California and Texas; studies of dropout among children of recent immigrants have been conducted in San Diego and Miami by Johns Hopkins, and evaluations of learning strategies in schools serving Navajo Indians have been conducted by the University of Northern Arizona. The goal of the program is to identify, develop, and evaluate effective programs for disadvantaged Hispanic, American Indian, Southeast Asian, and other language minority children.

The School, Family, and Community Connections Program

This program is focusing on the key connections between schools and families and between schools and communities to build better educational programs for disadvantaged children and youth. Initial work is seeking to provide a research base concerning the most effective ways for schools to interact with and assist parents of disadvantaged students and interact with the community to produce effective community involvement.

Abstract

This report analyzes the moment-by-moment construction of interaction by language minority children in a cooperative learning activity. The interaction occurred among students in a Spanish-English bilingual 3rd-grade classroom as part of a cooperative learning curriculum known as Cooperative Integrated Reading and Composition (CIRC), which was especially adapted for use in bilingual classrooms by language minority students. The analysis of interaction reveals that under supportive social circumstances, children are very active in probing and questioning their own knowledge and they rely on their shared expertise to attain instructional goals and supplemental goals that are related to their own expertise and concerns. The report supports the importance of promoting learning as a constructive process wherein students actively develop new knowledge through manipulation and questioning of their existing knowledge.

Acknowledgments

A revised version of this report will appear in a special issue of the journal *Discourse Processes* on literacy among language minority persons, to be published in January 1994.

Introduction

Educational Reform and Language Minority Students

The movement toward restructuring education in the U.S. is now over 10 years old and shows few signs of diminishing as a paramount public policy issue. Although the movement is characterized in recent years by increased attention to the questionable benefits of localized school management and parental choice of schools, the movement has consistently emphasized accountability of schools through increased use of tests to monitor the learning progress of students and the qualifications of teachers.

Cummins (1986) has argued that the pedagogical models underlying most instruction and testing of students, and language minority children in particular, assumes a "transmission" model of learning and assessment. This model emphasizes teachers' whole group presentation of learning material and students' passive receipt of such knowledge, followed by isolated question-answer problem solving, and testing of knowledge acquisition. In contrast to a "transmission" model, Cummins describes a "reciprocal" account of teaching, learning, and assessment in which students participate more actively in the construction of their own learning and in which assessments are used to empower this capacity to learn.

A similar criticism of the instruction provided language minority students is expressed by Tharp and Gallimore (1988). Their criticism is aimed primarily at the prevalence of an especially ineffective version of the "recitation script" followed by teachers and students in whole-group teacher-led instruction. This script has been investigated extensively (Mehan, 1979) and involves a three-part coordination of communication between the teacher and students. In its prototypical occurrence, a teacher reviews a lesson with a class by raising questions and then solicits and evaluates responses to questions by students. Although the recitation script appears to involve more than a teacher's broadcasting of facts and knowledge to students, its potential for reciprocity is attenuated by the way it is carried out. Tharp and Gallimore argue that students will benefit from interacting with a teacher to the extent that the teacher is engaged in an authentic academic conversation with students -- a conversation in which the teacher's participation enables the students to know, understand, and apply knowledge that would otherwise be impossible if students were working on their own.

In ineffective versions of the recitation script, teachers call only on students who volunteer to answer questions, and if a student's reply to a question is inappropriate, the teacher calls on another student to provide a "correct" answer. Individual students, accordingly, may not receive adequate attention to their own immediate learning needs, given that the questions are asked by the teacher. Enactment of instructionally effective versions of the recitation script would entail more responsive feedback and learning assistance by the teacher to individual students called upon and attention to students who did not volunteer to answer questions.

Accounts of more effective instruction share much in common with emerging trends in educational research often labeled as "social constructivist" or "social constructionist" accounts of teaching and learning. Although the two terms are often treated synonymously, they reflect at least two distinguishable and sometimes non-complementary perspectives. One perspective stems directly from Piagetian developmental theory. For example, Perret-Clermont et al., (1991) describe "constructivism" in terms of cognitive resolution of conceptual conflict mediated simultaneously through cognitive maturation and through social processes introducing and

elaborating the occurrence of conflict. From this perspective, once children have acquired certain cognitive prerequisites they then are ready for "new mental organizations [that] make the subject capable of new social interactions which, in turn, foster new mental organizations" (Perret-Clermont et al., 1991, p 46.).

A second perspective, "constructionism," does not focus on cognitive maturation, and instead, emphasizes the social construction of knowledge, mind, and culture. In the realm of education this orientation is reflected in works of Jerome Bruner (1986, 1990), Wertsch (1991), Lave (1991), and Moll (1990), who call attention to the sociohistorical or Vygotskian account of development, as well as the social organization of knowledge construction. In the present context, it is especially worthwhile to cite Bruner's (1986) conception of the role of language and communication in creating culture and their connection to how education fosters students' self-identity. The three quotes below capture these insights:

> Once one takes the view that a culture itself comprises an ambiguous text that is constantly in need of interpretation by those who participate in it, then the constitutive role of language in creating social reality becomes a topic of practical concern. [p. 122]

> The most general implication is that culture is constantly in process of being recreated as it is interpreted and renegotiated by its members. [p. 123]

> Education is (or should be) one of the principal forums for performing this function -- though it is often timid in doing so. [p. 123]

Although constructivist and constructionist accounts are not universally held, they are beginning to affect the school reform movement as educators and the public perceive the lack of progress toward educational goals attained by exclusive use of standardized tests and superficial restructuring of existing teacher-led whole-group-oriented instruction. The new approaches maintain that students learn by actively building upon what they already know. That is, knowledge cannot be effectively acquired by passive reading of or listening to new information. Instead, learners must actively integrate new information or knowledge so that it displaces or extends existing knowledge and skills. Researchers in the area of "situated cognition" consistent with Bruner (1986) further argue that acquisition of new knowledge is fully effective only when learners situate the new knowledge in everyday sociocultural contexts relevant to application and use of that knowledge.

Previous Research

Efforts to pursue a restructuring of instruction for language minority students consistent with these perspectives have begun to emerge. One of the best known educational interventions for language minority students stressing students' management of their classroom learning and use of out of school cultural knowledge is the Kamehameha Early Education Program (Calfee, et. al, 1981). The KEEP program was designed to help at-risk Hawaiian elementary school children to acquire advanced reading comprehension and reasoning skills. One of the key findings to emerge from research on KEEP is that students' reading skills are significantly facilitated when small groups of children are encouraged to actively explore the meaning a story may have to children given their out of school experiences (Au, 1980). KEEP children's small group interaction was effective because it allowed children to use their peers and family and community experiences as resources to guide their analyses of story meaning and ways for talking about a story. While many KEEP activities emphasized students' hands-on manipulation of learning materials, the

program did not focus as such on students doing their own active research projects.

Finding Out/Descubrimiento is an inquiry intervention for monolingual Spanish and bilingual Latino children which helps students in cooperative groups learn about science through the medium of hands-on research activities in the classroom (Cohen, DeAvila, and Initi, 1981). Anecdotal observations of children in the program suggest that the program works well in mixed language groups and that children's cognitive development is facilitated by teaching them basic principles of experimental inquiry tied to such notions as the nature of a science problem or question, a hypothesis and data, and the need for a procedure to analyze data in order to answer a problem. As with KEEP, Finding Out/Descubrimiento draws on materials and problems occurring within the boundaries of the classroom.

In more recent years, intervention projects involving language minority students conducting inquiry have begun to explore a more deliberate connection between the out-of-school everyday world and activities in the classroom. Mercado (1990), in collaboration with a 6th grade teacher, describes an intervention in a major northeastern city training Latino students to conduct qualitative research outside of the classroom to inform topics and issues of interest to students. Topics and issues identified by students as worthwhile included: How can we the citizens get more money for food and housing for the poor and homeless?; How can we stop drug abuse?; and How can we prevent murders, rapes, and robberies. Students were taught how to conduct interviews and ethnographic observation, to do archival research in libraries on topics and issues of interest, to use diaries to record their progress in research, and how to write reports. Mercado also arranged for students to do presentations on their research findings at an annual meeting of the National Association of Bilingual Educators.

Moll, Velez, and Greenberg (1990) are conducting an ongoing intervention project involving Latino school students and families, and teacher-collaborators in Tucson Arizona. Teachers are trained to do ethnographic observation while conducting visits to the children's family households. Then, teachers meet as a group to discuss prominent "funds of knowledge" available to students in their home and community environments. Funds of knowledge are important kinds of skills and knowledge that meet the everyday survival needs and that create the everyday cultural and social experiences of community members. Examples of funds of knowledge include what children and families know about nutrition and cooking, health care, jobs and job training, cultural celebrations, and so on.

After conducting a survey of important funds of knowledge of value to households, teachers initiate thematic research projects that students then carry out in the classroom. For example, students involved in a thematic unit on "construction of buildings" did out-of-school library research on this topic, had classroom visits by community housing construction workers who explained their craft and its connection to school subjects such as mathematics and reading, and designed and constructed buildings in the classroom out of toothpicks and other materials.

Moll, Velez, and Greenbergs' (1990) and Mercado's (1990) research explicitly draw on sociohistorical psychology as a theoretical rationale for the construction of interventions. The sociohistorical (or Vygotskian) school posits that all thinking and culture arise from social experience and that children's advancement in schooling rests on this institution's capacity to create "zones of proximal development" which allows students to acquire new skills and knowledge through social interaction (Moll, 1990). An important corollary of the approach is that it literally suggests that learning is not just learning "what" or even "how to do something" -- it involves learning how to "become" someone who is an expert in a given fund of knowledge.

Warren and Rosebery (1990) are conducting a project known as "Cheche Konnen" -- a

Haitian Creole term meaning "search for knowledge" in English. Cheche Konnen is being implemented in a large Northeastern urban community and involves Haitian immigrant and Puerto Rican students. In the curriculum, students experience hands-on science lessons in biology and other areas that involve a combination of out-of-school data gathering and in-classroom analysis and discussion of the scientific method, data and findings, and science report development. Research topics have included the ecosystem and pollution of a community pond, and reproductive cycles of garden animals. One of the most interesting areas of research on Cheche Konnen involves ethnographic and discourse analysis of students' classroom discussions of research projects. The analyses suggest that students are not just learning facts and scientific principles, but that they are constructing self-identities as "scientists."

Gutierrez (in preparation) has examined ways in which learning activities of Latino and other ethnically diverse students construct students' social identities as students within classrooms viewed as discourse communities. Students' identities within classroom discourse communities are literally constructed by how students talk and use language in academic activities. The work of investigators on learning interventions cited to this point all lead to the creation of classroom discourse communities in which intersubjective experiences among students foster acquisition of a self-identity as learners, thinkers, and knowledge explorers in a way that can help prepare students for advanced academic training. One of Gutierrez's key findings is that the teacher's organization of classroom communication is critical. Students are most involved and active in learning when they are given an opportunity to decide topics that might be initiated and explored in learning activities. It is not enough for a teacher to solicit students' initiation of topics -- students benefit when they take greater control of how to steer their mutual sense-making out of what is to be learned.

Analysis of Interaction in a CIRC Story Related Writing Activity

In this section, we present an example of moment-to-moment construction of interaction by language minority children in cooperative learning activity in our own research (Durán and Szymanski, 1992). This example illustrates many of the points raised in other constructivist studies of learning cited above. The interaction arose in an implementation of a cooperative learning curriculum known as Cooperative Integrated Reading and Composition (CIRC) in a Spanish-English bilingual 3rd grade classroom. The CIRC curriculum was especially adapted for use in bilingual classrooms with language minority students (Calderón, 1989; Calderón, Hertz-Lazarowitz, & Tinajero, 1991).

CIRC is intended to assist students in acquiring a range of oral expression, reading, and writing skills within a set of structured activities organized around the notion of a "Treasure Hunt" unit built upon a story text. Key Treasure Hunt activities include:

- Teams or "families" of students discussing target vocabulary words and predicting the events in a story before reading it
- Pairs of students within teams silently reading and then orally reading in pairs the first part of a story
- Pairs or the entire team/family then discussing and answering questions based on the first part of a story, including a prediction question on what will happen in the second part of the story

- Repetition of the foregoing to activities with the second part of a story. (No prediction question is necessarily built in to the second part questions.)

- Pairs or the entire team/family discussing and completing a story-related writing assignment

Enactment of each of the activities outlined above develops socially and intra-individually over time in the classroom. Ethnographic observation of the activities suggests that conduct of each activity becomes framed or scripted -- i.e., an orderliness appears in the ways students interpret and participate in an activity as if it had a "plot" with certain actions and conditions for action that guide students' judgment about how to organize their interaction and task intersubjectivity. The occurrence of an activity as a concrete interactional event remains constitutive -- an interactional accomplishment, unique in its occurrence and based on students' situated judgments about what is occurring in the present, given what has occurred in the past, and what needs attention next.

The social and cognitive operations enacted by the students utilize communication and linguistic strategies as tools for guiding their collective attention and for accomplishing specific kinds of interactional and cognitive/academic work. Extended ethnographic observation of students suggests that these strategies develop a tool-like mediating capacity within activities. Students acquire a repertoire of ways of speaking and signaling intention that become available as resources for accomplishing an activity. These repertoires for communicating and accomplishing work resemble the notion of a "social language" alluded to by activity theorists -- a style of talk and language usage characterizing participation in a community of practice (Wertsch, 1991).

Analysis of Story Related Writing Interaction

In the data and analysis that follows, we identify different kinds of coordinated work accomplished by students during a story-related writing activity that is part of the CIRC curriculum. Our examination of different kinds of coordinated action among students reveals evidence of communicative conventions adopted collectively and individually by students to realize their learning and teaching of each other.

This analysis focuses on the coordinated action of four native Spanish-speaking third graders who are working on a Story Related Writing activity. The Story Related Writing is one of the last activities in the CIRC Treasure Hunt cycle. It occurs after students have read a story and answered questions based on the story. The activity emphasizes the story's theme, because it requires the students to relate an experience of their own to that of the story's protagonist.

The students under investigation have just transitioned from reading in Spanish to reading in English in the CIRC curriculum; this is their 6th day of CIRC instruction in English. Prior to their transition in April, the children conducted CIRC in Spanish. The students had worked with the CIRC curriculum for seven months.

In the specific story-related writing incident to be analyzed, the teacher had directed the students to describe to the other group members what they proposed to write in response to the theme: What you would do if you were big? Upon completion of the shared discussion, the teacher distributed paper for them to begin the actual writing. The transcript begins after all the family members except Leticia have shared their proposed story with the rest of the group.

Our analysis focuses on several aspects of the cooperative learning group's language

and interaction that have implications for understanding how students guide their own teaching and learning in CIRC activities as a community of practice. Leticia's story structuring is coordinated around her listing of the events prompted by the opening sentence frame for her narrative: "If I were big...." The linguistic framing invites accompanying framing of further interaction -- Leticia is expected to generate a list things she would do if she were big, and the other participants interpret this occasion as one where they may react to Leticia's talk and contribute to the completion of the list.

The interactional possibilities are further extended, as additional imbedded sub-activities arise at the initiative of the other participants. These added activities involve assessments and feedback regarding language form and task progress, and discussion about specific aspects of the story structure. The imbedded activities are spontaneously raised as relevant by the other group members and resolved collectively by the group.

Four aspects of this co-constructed story structuring activity will be considered in detail: 1) structuring the story world, 2) assessing and correcting language forms, 3) assessing the story world's content, and 4) extending the story world text. (Please refer to the appendix for the complete transcript and transcription conventions.)

Structuring the Story World

As Leticia tells the group what she would do if she were big, she is structuring a story world. This is a fictive, projected "other" world created by unfolding narrative events and details in response to the teacher's prompt: What would you do if you were big? Leticia's oral listing of story events provides an activity framework for the other group members. In communicating her story content to the others, she affords them the interactional opportunity to participate in its creation. In fact, one might go so far as to say that the story world structure is co-produced through the interaction of all the participants.

The entire story construction activity frame is clearly marked as beginning and ending in a co-produced fashion. Vanessa allocates the turn on line 1 after commenting on Alberto's narrative which has just ended. Leticia accepts the turn on line 2 with "okay" and proceeds to begin her own story structuring by using an "if" clause to temporally place the narrative events in a conditional future. The "if" construction creates a syntactic frame that affords construction of a list of descriptions allowing envisionment of the story world under development.

1 V: .huh (don't say you'll) buy a car then, go Leticia
2 L: okay. .hif I was big, I could like (.2) uh-hm buy a ca:r, get
3 my li- my license, a:nd (.) like go CHOPpi[ng, work]

Leticia's list of "if I were big" events is characterized by her repeated use of the syntactic structure "I could + verb." On lines 2 and 3, the "I could" construction is used in a three part list: she could buy a car, get her license, and go shopping. The only deviation from this syntactic pattern is on lines 11 and 12 when Leticia quotes herself telling her mom that she is not going to work, because Leti will work for her.

9 L: go: to work and I could help my mo:m, and tell her that no, she
10 is not going to work, I'm going to work fo:r he:r, and=
11 V: =.h°oh=
12 L: =I could clean the hou:se for her, I could do anything in
13 the hou:se, and (.) I could take her to Ne:w Yo:rk,uh ha uh n
14 other places=

The story structuring ends as it had begun, as a co-produced activity. Leticia begins to end her story structuring on line 36 when she asks the rest of the group: "so that's all?". Just as she had accepted the turn with an "okay" signal, she relinquishes her story structuring role with the same response.

33 L: *oh:. like this? ((points to her lapel mic)) okay. (.3)*
34 V: *okay. (.)*
35 G: *now let's [(call so she can bring us)] paper*
36 L: *[so that's all? okay]*

Assessing and Correcting Language Forms

Leticia's production of the story structure provides for the imbedded activity of assessing and correcting language forms. The oral production of the story structure makes available to its recipients the particular grammatical form of the anticipated written story. The students perceive this oral discussion of the story-related writing task to be an opportunity for the correction of an oral form as it is being previewed for the written task.

Shopping-chopping
One such assessing and correcting of language form occurs because of a mispronunciation. On line 4, Leticia pronounces the word shopping as "chopping." This triggers Vanessa's modeling of the correct pronunciation on the following line.

2 L: *okay. .hif I was big, I could like (.2) uh-hm buy a ca:r, get*
3 *my li- my license, a:nd (.) like go CHOPpi[ng, work]*
4 V: *[SH:]O:Pping, no CHOpping, sho:pping*
5 L: *chopping?*
6 *((all laugh))*
7 L: *what[ever], I can't <say it right>. and [I could] (.)*
8 V: *[°shopping] [shopping]*
9 L: *go: to work and I could help my mo:m, and tell her that no, she*
10 *is not going to work, I'm going to work fo:r he:r, and=*

It is interesting to note that Vanessa does the correction in Spanish evidenced by her use of 'no' in "no chopping" instead of the English 'not'. Her language choice seems to further emphasize her repair motive; it is not an error of lexical choice, but rather, one of pronunciation. In effect, when Leticia's attempted self-repair of "chopping" on line 5 results in her repetition of the trouble source, she announces on line 7, "whatever, I can't say it right," showing her understanding that the correction is motivated by an error in her pronunciation and that it is time to move on in her script for the activity. Since the pronunciation error is detected and resolved to the extent immediately possible, and since there is no lexical or semantic issue at hand between the actions 'shopping' and 'chopping', she decides to continue her story structuring.

Policeman-policegirl
Vanessa assesses another language form later in Leticia's production of the story structure; this time the issue is the appropriateness of a lexical category. On line 19, Leticia says she wants to be a policeman. Vanessa corrects Leticia on line 20 by inserting "girl" for the gender element of the compound word policeman. Leticia proceeds to correct herself in her subsequent turn.

16 L: *[she wanted to-] to go. (.) and (.) me:::, I could buy a house*
17 *for me/mi, for (.) my family, (.) and (.) hah I could*
18 G: *she's going to [be RIch.]*
19 L: *[wo:rk] (as) a \policema:n*
20 V: *poli:cegirl [((laughs))]*
21 L: *[police girl] a::nd (.1) maybe a TEAcher,o:r another thi:ng=*

The issue here is one of both gender and language form. The most prominent categorical gender distinction for these children is between boy and girl. Vanessa applies her conventional knowledge of compound words and adds the specific category 'girl' to the base word "police."

Assessing Story Structure Content

The recipients of the story text use it not only to collaborate in the production of its form, but also to comment on its content. Assessments are made by the listeners that evaluate the story events based on their reflection and cultural interpretation of what has been said in the story structuring. In

doing so, assessment provides the narrator, Leticia, with a resource: it guides her production of future speech.

She'll be old, huh-She's going to be rich

On line 15, Vanessa assess what Leticia has said so far when she interjects "she'll be old, huh." This comment makes hearable to Leticia what has been understood thus far from her listing of future events. Vanessa's use of the 3rd person singular pronoun "she" leaves its referent ambiguous, however; "she" could conceivably refer to Leticia who will be "big" (grown up) or Leticia's mom. Evidence of the utility that assessing comments have to producing story structure is Leticia's topicalization in line 16: "and me:::, I could" giving emphasis to the active subject in her story events, herself.

12 L: =I could clean the hou:se for her, I could do anything in the
13 hou:se, and (.) I could take her to Ne:w Yo:rk, uh ha uh n
14 other places=
15 V: [=<she'll be old>, huh.]((nods))
16 L: [she wanted to-] to go. (.) and (.) me:::, I could buy a house
17 for me/mi, for (.) my family, (.) and (.) hah I could
18 G: she's going to [be RIch.]
19 L: [wo:rk] (as) a policema:n

On line 18, Gilberto follows his partner's lead. He uses similar syntax to evaluate what it means for Leticia to buy a house for her family: "she's going to be rich." In this case, the pronoun referent is unambiguous, because it is Leticia who will be rich. Consequently she doesn't explicitly address the comment.

I want to be a teacher-I don't want to be a policeman

Two other assessments occur farther down on the transcript in a manner parallel to the ones just talked about. On line 22, Vanessa assesses Leticia's statement, "I want to be a teacher" by ratifying the idea as a profession she too would like to pursue. Gilberto again takes the opportunity to parallel his partner's comment, and he subsequently expresses his opposition to Leticia's desire to become a policeman on line 25. To evaluate Leticia's story structure content, Vanessa and Gilberto both jump out of the future story structure mode and ground themselves in the present moment by using the indicative "I (don't) want to be ...." These assessments have value to Leticia in a similar manner as the text-related evaluations above; she can use the information to clarify any misunderstanding about her previous talk.

17 L: for me/mi, for (.) my family, (.) and (.) hah I could
18 G: she's going to [be RIch.]
19 L: [wo:rk] (as) a policema:n
20 V: poli:cegirl [((laughs))]
21 L: [police girl] a::nd (.1) maybe a TEAcher,o:r another thi:ng=
22 V: =I want [to be] a teacher=
23 L: [o:r]
24 ?: =no( )
25 G: I don't want to be a cop. they'll fight you.

Both of these pairs of assessments, those reflecting inferred understandings of Leticia's talk and those making personal value judgments about her talk, are projections of the individual student's world into that of the collective group. Each utterance is created by previous talk, shows an understanding of the present state of the activity, and anticipates the future direction of talk. The talk that is available for each group member is a resource through which personal views and ideas become collective in their discussion. The result is a collective group world which borrows from each of the individual members to form a common group world.

Text Extension

Sometimes an assessment made on previous talk is not just left as a resourceful comment to be used by the person sharing the story to clarify misunderstanding in previous talk. When a comment is taken up by the group and pursued by the group's members as a topic in itself, the original text that gave place to the topic can be said to be "extended" in the topic's pursuit. This will be referred to as "text extension."

Gilberto's comment on line 25, "I don't want to be a cop" elicits this kind of extended pursuit of the policeman topic by Vanessa. First she aligns herself with Gilberto's point of view by seconding his statement with an emphatic "I know." Her subsequent language is oriented toward engaging Leticia in the discussion. To do this, Vanessa repeatedly uses the sound "eh" and then Leti's name to prompt a response. Once she gets Leti's attention, she proceeds to foretell Leti's fate should she become a cop.

25 G: I don't want to be a cop. they'll fight you.
26 V: I KNOW they could kill you. eh, eh, eh. (.) eh, (.) Leti.(.)
27 Leti. (.) Leti. (.2) if I was you I wouldn't be a a cop, you know
28 why, 'cuz they could sho- shoot you, you would be dead.
29 L: if I would/what?
30 V: if you be a cop, [um] they- they shoot you.
31 L: [heh]
32 G: you can/could be dead.
33 L: oh:. like this? ((points to her lapel mic)) okay. (.3)
34 V: okay. (.)
35 G: now let's [(call so she can bring us)] paper
36 L: [so that's all? okay]

Vanessa's "okay" on line 34 marks the close of the text extension and sets up the relevance for a closing to Leticia's bigger story structuring event. Further evidence for Vanessa's completion of the story structuring is Leticia's questioning on line 36, "so that's all?"; this indicates not only her uncertainty about whether the other members of the group have finished her story structure but also her understanding that indeed they may have already finished it.

Conclusion

Leticia's listing of events provides a framework for the story sharing activity that allows the other members in the group the opportunity to participate in its production. In response, they take the opportunity to repair Leticia's language form and to share comments about each other's perception of the world in light of their own experiences.

The imbedded activities, assessing and correcting language forms, assessing task progress, assessing story content, and extending the story text build on the storytelling script and enrich the students' teaching and learning opportunities in what otherwise would be a sole-produced story activity -- if it had occurred as non-cooperative learning activity. The children's ability to participate in the cooperative activity given Leticia's story script shows the children's attendance and orientation to multiple aspects of literacy production: grammatical features, lexical choice, semantic content, and their personal value judgments about story themes.

Moves to signal assessment and evaluative feedback are central to conduct of the activity described and have implications for viewing CIRC activities as a community of practice within a school setting. Educators and cognitive scientists are quick to point to the importance of promoting learning as a constructive process wherein students actively develop new knowledge through manipulation and questioning of their existing knowledge. Interaction of the sort described in this paper reveals that under supportive social circumstances, children are very active in probing and questioning their own knowledge and that they rely on their shared expertise in attaining a teacher's instructional goals and, in addition, supplemental goals that make sense to children given their own expertise and concerns.

The interaction shown by students and analyzed in this paper exemplifies how the moment-to-moment regulation of attention and effort on the part of students constructs

their joint literate action (Green and Meyer, 1991; Santa Barbara Classroom Discourse Group, 1992). Analysis of the interaction of students directly makes visible what literacy may be taken to mean as coordinated actions by students and ways in which conversational mechanisms afford such sense-making (Gumperz, 1986).

The fact that we observed the children extending comments on story themes connected to their everyday lives is important to note. It suggests that they are eager to connect their fuller cultural and social identities to the academic activities that arise in classroom instruction (Goodman & Goodman, 1990). This possibility raises the issue of better ways in which to connect students' school-based communities of practice with other communities of practice beyond school physical boundaries, and the implications of fostering such connections in order to strengthen children's schooling success.

Appendix

Transcription Conventions

[ ]	overlapping
( )	unsure hearing
(( ))	transcriber's and analyst's comments
:	lengthened pronunciation
?	final rising intonation
,	listing intonation (e.g. more is expected)
.	final falling intonation
(.)	micropause
(.2)	two tenths of a second pause
MY	stressed pronunciation
=	latching of speaker's utterances
-	truncation (e.g. what ti- what time is it?)
would/what	alternate hearings
°bye	softly spoken
<goodbye>	rapidly spoken in relation to surrounding talk
.h	in breath

1 V: .huh (don't say you'll) buy a car then, go Leticia
2 L: okay. .hif I was big, I could like (.2) uh-hm buy a ca:r, get my li- my license, a:nd (.) like
3 go CHOPpi[ng, work]
4 V: [SH:]O:Pping, no CHOpping, sho:pping
5 L: chopping?
6 ((all laugh))
7 L: what[ever], I can't <say it right>. and [I could] (.)
8 V: [°shopping] [shopping]
9 L: go: to work and I could help my mo:m, and tell her that no, she is not going to work, I'm
10 going to work fo:r he:r, and=
11 V: =.h°oh=
12 L: =I could clean the hou:se for her, I could do anything in the hou:se, and (.) I could take her
13 to Ne:w Yo:rk, uh ha uh n other places=
14 V: [=<she'll be old>, huh.]((nods))
15 L: [she wanted to-] to go. (.) and (.) me:::, I could buy a house for me/mi, for (.) my family, (.)
16 and (.) hah I could
17 G: she's going to [be RIch.]
18 L: [wo:rk] (as) a policema:n
19 V: poli:cegirl [((laughs))]
20 L: [police girl] a::nd (.1) maybe a TEAcher,o:r another thi:ng=
21 V: =I want [to be] a teacher=
22 L: [o:r]
23 ?: =no( )
24 G: I don't want to be a cop. they'll fight you.
25 V: I KNOW they could kill you. eh, eh, eh. (.) eh, (.) Leti.(.) Leti. (.) Leti. (.2) if I was you I
26 wouldn't be a a cop, you know why, 'cuz they could sho- shoot you, you would be dead.
27 L: if I would/what?
28 V: if you be a cop, [um] they- they shoot you.
29 L: [heh]
30 G: you can/could be dead.
31 L: oh:. like this? ((points to her lapel mic)) okay. (.3)
32 V: okay. (.)
33 G: now let's [(call so she can bring us)] paper
34 L: [so that's all? okay]

References

Au, K. (1980). On participation structures in reading. *Anthropology and Education Quarterly, XI*, (2), 91-115.

Bruner, J. (1990). *Acts of meaning*. Cambridge: Harvard University Press.

Bruner, J. (1986). *Actual minds, possible worlds*. Cambridge: Harvard University Press.

Calderón, M. (1989). Cooperative learning for LEP students. *Intercultural Development Research Association Newsletter. XVI*, (9), 1-7.

Calderón, M, Hertz-Lazarowitz, R., & Tinajero, J. (October 1991). Adapting CIRC to multiethnic and bilingual classrooms, *12* (1), 17-20.

Calfee, R., Cazden, C., Durán, R., Griffin, M., Martus, M. & Willis H. (1981, unpublished manuscript). *Designing reading instruction for cultural minorities: The case of the Kamehameha Early Education Program.*

Cohen, E., DeAvila, E., & Initi, J. (1981). *Multi-Cultural improvement of cognitive ability.* Unpublished manuscript. Palo Alto, C.A.: Stanford University.

Cummins, J. (1986). Empowering minority students: A framework for intervention. *Harvard Educational Review. 56* (1), 18-36.

Durán, R. & Szymanski, M. (1992) Activity and interaction in cooperative learning. Paper presented at the American Anthropological Association Annual Meeting. San Francisco.

Goodman, Y. & Goodman, K. (1990). Vygotsky in a whole-language perspective. In L. Moll (Ed.) *Vygotsky and education.* Cambridge MA: Harvard University Press, 223-250.

Green, J. L., & Meyer, L. A. (1991). The embedddedness of reading in classroom life: Reading as a situated process. In C. Baker & A. Luke (Eds.) *Toward a critical sociology of reading pedagogy.* Philadelphia: John Benjamins, 141-160.

Gumperz, J. (1986). Interactional sociolinguistics and the study of schooling. In J. Cook-Gumperz (Ed.), *The social construction of literacy.* New York: Cambridge University Press, 45-68.

Gutierrez, K. (in preparation). Unpackaging academic literacy. *Discourse Processes.*

Lave, J. (1991). Situating learning in communities of practice. In L. Resnick, J. Levine, S. Teasley (Eds.) *Perspectives on socially shared cognition.* Washington, DC: American Psychological Association.

Mehan, H. (1979). *Learning lessons.* Cambridge, MA: Harvard University Press.

Mercado, C. (1990). Researching research: A student-teacher-researcher collaborative project at Hunter College of CUNY. (unpublished manuscript).

Moll, L. (Ed.) (1990). *Vygotsky and education.* New York: Cambridge University Press.

Moll, L., Velez-Ibanez, C. & Greenberg, J. (1990). *Community knowledge and classroom practice: Combining resources for literacy instruction.* Arlington, V.A.: Development Associates.

Perret-Clermont, A., Perret, J., & Bell, N. (1991). The social construction of meaning and cognitive activity in elementary school children. In L. Resnick, J. Levine, & S. Teasley (Eds.) *Perspectives on socially shared cognition.* Washington, D.C.: American Psychological Association.

Tharp, R. G. & Gallimore, R. (1988). *Rousing minds to life.* Cambridge: Cambridge University Press.

Warren, B. & Rosebery, A. (1990). *Cheche Konnen. Collaborative scientific inquiry in language minority classrooms.* Arlington, V.A.: Development Associates.

Wertsch, J. (1985). *Vygotsky and the social formation of mind.* Cambridge, MA: Harvard University Press.

Wertsch, J. (1991). *Voices of the mind. A sociocultural approach to mediated action.* Cambridge, MA: Harvard University Press.